



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor Application of:

Sammells

: Group Art Unit: 1745

Serial No. 09/724,131

: Examiner: Not assigned

Filed: November 28, 2000

For: MIXED CONDUCTING  
MEMBRANE FOR CARBON  
DIOXIDE SEPARATION AND  
PARTIAL OXIDATION  
REACTIONS

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*Gerri Lynch*  
GERI LYNCH

INFORMATION DISCLOSURE STATEMENT

Asst. Commissioner of Patents  
Washington, D.C. 20231

Sir:

The Examiner is respectfully requested to consider the references which may qualify as prior art. For the Examiner's convenience, the references are listed on the attached Patent and Trademark Office form PTO-1449.

The Examiner is also requested to consider U.S. Patent Application No. 08/960,182, filed October 29, 1997. For the Examiner's convenience the application, as filed, is enclosed.

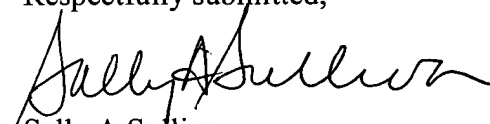
References listed in the PTO-1449 submitted herewith which do not specify the month of publication have a year of publication sufficiently earlier than the effective US filing date and any foreign priority date so that the particular month of publication is not in issue.

References known to the applicants have been listed on PTO-1449. That information is

cited in a spirit of forthrightness and cooperation to enable the applicants to obtain that measure of protection for the invention to which there is entitlement. However, no representation is made that the listed art actually qualifies as prior art under the patent statute and the mere use of PTO-1449 is not an admission that all listed references are prior art. No representation is made that applicants know of the best art.

It is believed this submission does not require the payment of a fee as it is being submitted prior to the issuance of an Office Action on the merits of the application. If this is incorrect, please deduct the appropriate fee from deposit account no. 07-1969.

Respectfully submitted,

  
Sally A Sullivan,  
Reg. No. 32,064

GREENLEE, WINNER AND SULLIVAN, P.C.  
5370 Manhattan Circle, Suite 201, Boulder, CO 80303  
Telephone: (303) 499-8080; Facsimile: (303) 499-8089  
gal: June 12, 2001  
Attorney Docket No. 88-99



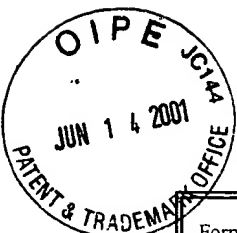
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Form PTO-1449		
ATTY DOCKET NO.: 88-99	SERIAL NO.: 09/724,131	FILING DATE: November 28, 2000
APPLICANT: Sammells		GROUP: 1745

U.S. PATENT DOCUMENTS

Exmr. Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
		6,090,312	07/18/00	Ziaka et al.	252	373	
		6,033,632	03/07/00	Schwartz et al.	422	190	
		5,989,740	11/23/99	Tomimatsu et al.	429	16	
		5,983,488	11/16/99	Erickson et al.	29	731	
		5,928,489	07/27/99	Winnick	205	618	
		5,897,972	04/27/99	Hosaka	429	16	
		5,888,272	03/30/99	Prasad et al.	95	54	
		5,869,203	02/09/99	Huang et al.	429	46	
		5,817,597	10/06/98	Carolan et al.	502	400	
		5,723,074	03/03/98	Balachandran et al.	252	519	
		5,712,220	01/27/98	Carolan et al.	502	400	
		5,622,790	04/22/97	Dicks et al.	429	16	
		5,618,405	04/08/97	Winnick	205	763	
		5,595,832	01/21/97	Tomimatsu et al.	429	16	
		5,580,497	12/03/96	Balachandran et al.	252	519	
		5,380,600	01/10/95	Hansen et al.	429	17	
		5,354,627	10/11/94	Hatoh et al.	429	16	
		5,306,411	04/26/94	Mazanec et al.	204	265	
		5,229,102	07/20/93	Minet et al.	423	652	
		5,075,277	12/24/91	Saiai et al.	502	334	
		4,859,296	08/22/89	Marianowski et al.	204	129	
		4,827,071	05/02/89	Hazbun	585	443	



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ATTY DOCKET NO.: 88-99	SERIAL NO.: 09/724,131	FILING DATE: November 28, 2000
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		4,793,004	12/27/88	Long et al.	2	49	
		4,791,079	12/13/88	Hazbun	502	4	
		4,738,760	04/19/88	Marianowski et al.	204	130	
		4,661,422	04/28/87	Marianowski et al.	429	13	
		4,480,017	10/30/84	Takeuchi et al.	429	13	
		4,410,607	10/18/83	Arons et al.	429	40	
		4,079,171	03/14/78	Marianowski et al.	429	46	

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes/No
		WO98/23051	05/28/98	PCT	H04J 3/08		

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

			<i>Abudula et al. (1996), "Oxidation mechanism and effective anode thickness of SOFC for dry methane fuel," Solid State Ionics 86-88:1203-1209</i>
			<i>Ang, P.G.P. and Sammells, A.F., (June 1980), "Influence of Electrolyte Composition on Electrode Kinetics in the Molten Carbonate Fuel Cell," J. Electrochem. Soc. 127:1287-1294</i>
			<i>Berger et al. (1996), "Nickel catalysts for internal reforming in molten carbonate fuel cells," Appl. Catalysis A: General 143:343-365</i>
			<i>Biedenkopf et al. (1998), "The corrosion behaviour of iron and chromium in molten (Li<sub>0.62</sub>K<sub>0.38</sub>)<sub>2</sub>CO<sub>3</sub>," Electrochimica Acta 44:683-692</i>
			<i>Lagergren, C. and Lindbergh, G. (1998), "Experimental determination of effective conductivities in porous molten carbonate fuel cell electrodes," Electrochimica Acta 44:503-511</i>
			<i>Murai et al. (Aug 1996), "Deformation Mechanism of Porous Nickel Oxide in Molten Li/K Carbonates," J. Electrochem. Soc. 143:2481-2486</i>



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			<i>Murai et al. (Sept 1996), "Crystal Growth of <math>\gamma</math>-Lithium Aluminate in Molten Li/K Carbonates," J. Electrochem. Soc. 143:2776-2783</i>
			<i>Murai et al. (Nov 1996), "Lithiation of Alumina in Molten Li/K Carbonates," J. Electrochem. Soc. 143:3456-3462</i>
			<i>Otoshi et al. (May 1991), "Changes in the Phases and Electrical Conduction Properties of <math>(La_{1-x}Sr_x)_2MnO_{3-\delta}</math>" J. Electrochem. Soc. 138:1519</i>
			<i>Passalacqua et al. (Nov 1996) "Porous ceramic membranes for direct internal reforming molten carbonate fuel cells," Material Letts. 29:177-183</i>
			<i>Prins-Jansen et al. (1996), "An ac-Impedance Study of Dense and Porous Electrodes in Molten-Carbonate Fuel Cells," Electrochimica Acta 41:1323-1329</i>
			<i>Sammells et al. (Feb 1980), "Development of Sulfur-Tolerant Components for the Molten Carbonate Fuel Cell," J. Electrochem. Soc. 127:350-357</i>
<b>EXAMINER</b>			<b>DATE CONSIDERED</b>
<b>*EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

12/20/89